# Louisville Metro Air Pollution Control District 850 Barret Ave., Louisville, Kentucky 40204 19 December 2012

# **Title V Statement of Basis**

Company: Conco, Inc.			
Plant Location: 4000 Oak	lawn Drive, Louisv	rille, Kentucky 40219	
Date Application Received	<b>d:</b> 16 June 2004	<b>Date Admin Complete: 15</b>	5 August 2004
Date of Draft Permit: 16 I	November 2012 <b>D</b>	Oate of Proposed Permit: 16 Nov	ember 2012
District Engineer: Narathi	p Chitradon	<b>Permit No:</b> 88-97-TV(R1)	
<b>Plant ID:</b> 0047	SIC Code: 3411	<b>NAICS</b> : 332431	<b>AFS:</b> 00047
Introduction:			
Regulations Part 70, and (3	Title V of the Cle isting District and	egulation 2.16, (2) Title 40 of the ean Air Act Amendments of 1990 Federal air requirements and to pr requirements.	. Its purpose is to
dioxide (NO <sub>2</sub> ), carbon mon	oxide (CO), 1 hr a	at area for lead (Pb), sulfur dioxidend 8 hr ozone (O <sub>3</sub> ), and particulate area for particulate matter less	e matter less than
Application Type/Permit	Activity:		
[ ] Initial Issuance			
[ ] Permit Revision [ ] Administrative [ ] Minor [ ] Significant			
[ X ] Permit Renewal			
Compliance Summary:			
[ X ] Compliance certificati		] Compliance schedule included X ] Source is operating in compli	

### I. Source Information

1. **Product Description:** Conco manufactures and refurbishes steel ammunition cans and boxes according to US Military specifications.

- **2. Process Description:** Welded sheet metal ammunition cans are cleaned, coated with zinc phosphate, dried, spray painted or dipped, and then baked.
- **3. Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.

### 4. Emission Unit Summary:

Emission Unit	Equipment Description	
U1 and U2	Two (2) Paint Systems	
U3	Two (2) Parts Washers	

**Fugitive Sources:** The facility uses particulate filters for Emission Points E5, E6, and E14. The remaining emission points are fugitive sources.

#### **6.** Permit Revisions:

Revision No.	Issue Date	Public Notice Date	Type	Attachment No./Page No.	Description
Initial	12/15/1999	10/17/1999	Initial	Entire Permit	Initial Permit Issuance
R1	12/19/2012	11/16/2012	Renewal and Revision	Entire Permit	Permit renewal; R.O. addition; Add MACT, 40 CFR 63, Subpart MMMM; incorporate Permit 274-01-C

### 7. Emission Summary:

Pollutant	Actual Emissions (tpy) 2010 Data	Pollutant that triggered Major Source Status (based on PTE)
СО	0.736	No
NO <sub>x</sub>	0.881	No

Pollutant	Actual Emissions (tpy) 2010 Data	Pollutant that triggered Major Source Status (based on PTE)
SO <sub>2</sub>	0.0052	No
PM	2.049	No
VOC	36.02	Yes
Single HAP > 1 tpy	Xylene (1330-20-7) = 2.018 Triethylamine (121-44-8) =1.087 Diethylene Glycol Monobutyl Ether (112-34-5) = 5.245	Yes
Total HAPs	8.81	Yes

## **8.** Applicable Requirements:

[ ] PSD	[ ] 40 CFR 60	[X] SIP	[X] 40 CFR 63
[ ] NSR	[ ] 40 CFR 61	[X] District-Origin	[ ] Other

- **9. Future MACT Requirements:** The source has no future MACT requirements.
- **10.** Referenced Federal Regulations in Permit:

40 CFR Part 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

#### II. Regulatory Analysis

- 1. Acid Rain Requirements: Conco, Inc. is not subject to the Acid Rain Program.
- **2. Stratospheric Ozone Protection Requirements**: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. Conco, Inc. does not manufacture, sell, distributes, or otherwise use any of the listed chemicals.
- **3. Prevention of Accidental Releases 112(r):** Conco, Inc. does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
- **4. 40 CFR Part 64 Applicability Determination:** Conco, Inc. is not subject to 40 CFR Part 64 *Compliance Assurance Monitoring*, since each emission point has no

supplementary control device for VOC and HAP emissions for which the company is a major source and each emission point is not capable of exceeding any emission standard or limitation.

## 5. Basis of Regulation Applicability

#### a. **Plant-wide**

Conco, Inc. is a major source for VOC, single HAP, and total HAPs. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.

Conco, Inc. has not modeled any TACs and therefore must have de minimis emissions or re-evaluate. The company will follow the generic TAC language found in their permit in order to maintain compliance with the STAR Program. Regulations 5.01, 5.21, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. Conco has submitted a Cat 1 and 2 TAC EA demo for their existing source.

## b. Emission Unit U1 and U2 - Two (2) Paint Systems

### i. **Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E1: North wash system (aka bonderite or phosphating)	360 cans/hr	1967	For all the emission points in these	For all the emission points in these emission units:  Regulation 1.05 establishes compliance with emission standards and maintenance
E2: North dry oven (aka dry off oven)	360 cans/hr	1967	emission units: 1.05, 5.00, 5.01, 5.02, 5.21, 5.23, 7.08, 7.59, and 40 CFR 63	requirements.  Regulation 5.00, 5.01, 5.21, and 5.23 (STAR Program) establishes the requirements for Environmental Acceptability of toxic air
E4: North omega booth	7.0 gal/hr	1986	Subpart MMMM	contaminants (TACs) and the requirement to comply with all applicable emission standards.

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E5: North inside booth	5.5 gal/hr	1967		Regulation 7.08 establishes the requirements for PM emission from existing processes that commenced
E6: North touch up booth	5.5 gal/hr	1967		construction after September 1, 1976.
				Regulation 7.59 establishes the requirements for VOC emissions from existing paint
E7: North cover dip tank	20 gal. tank	1983		spray booths for metal parts commenced after May 20, 1981.
E8: North bake oven (aka cure oven)	2,250,000 Btu/hr input	1967		Regulation 5.02 adopts and incorporates the EPA regulations, including 40 CFR 63 Subpart MMMM.
E22: Laboratory oven	18 kW	1986		miscellaneous metal parts and products surface coating facilities which uses 250 gallon or more HAP containing coatings and is located at a major source of
E25: North cover and bottom dip tank	125 gal. tank	2001		HAP emissions.
E10: South wash system (aka bonderite or phosphating)	360 cans/hr	1967		
E11: South dry oven (aka dry off oven)	360 cans/hr	1967		
E12: South boiler	125hp OR 318,000 Btu/hr	1967		

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E13: South omega booth	7.0 gal/hr	1986		
E14: South inside booth/glue booth	5.5 gal/hr	1967		
E16: South dip tank	1,200 gal. tank	1993		
E17: South bake oven (aka cure oven)	2,250,000 Btu/hr input	1968		
E19: South cover touch up booth	0.2 gal/hr	1986		
E20: Gasket gluing	0.1 gal/hr	1986		

### ii. Standards/Operating Limits

#### 1) **VOC**

Regulation 7.59, section 3.1 defines the VOC content limits for the coatings used for miscellaneous metal parts and products surface coating operation. The VOC content limit established in the company's original Title V Permit (88-97-TV) was the limit for extreme performance coatings (Regulation 7.59, section 3.1.3). The District decided to establish multiple limits in this permit to allow the company a choice of coatings to use.

## 2) **Opacity**

The coating operations are subject to an opacity standard of less than 20% in accordance with Regulation 7.08, section 3.1.1.

#### 3) **PM**

The coating operations are subject to a PM standard of less than 7.09 lb/hr in accordance with Regulation 7.08, section 3.1.2. Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (45.9%), and the efficiency of the filters (greater than 90%), the PM emission limit of the spray booth cannot be exceeded.

#### 4) **HAP**

- (a) Per Regulation 5.02, section 3.74, the source is subject to 40 CFR Part 63, Subpart MMMM.
- (b) Per 40 CFR 63.3890(b)(1), all coatings used at this plant are classified as general use coatings. For existing general use coating affected sources, the organic HAP emission limit is 2.6 lb organic HAP per gallon coating solids used during each 12-month compliance period.

#### 5) **TAC**

Regulations 5.00, 5.01, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. Multiple STAR EA Demonstrations have been submitted for the TACs found at their facility, except for the chrome used in their wash system. From an email correspondence received on September 07, 2010, the company accepted a usage limit for the chrome-containing product in order to demonstrate compliance with the STAR program. The company is below de minimis for the TACs reported in their STAR EA Demonstrations.

#### iii. Monitoring and Record Keeping

#### 1) **VOC**

(a) Regulation 2.16, sections 4.1.9.1 and 4.1.9.2 require sufficient monitoring and record keeping to assure

- ongoing compliance with the terms and conditions of the permit.
- (b) The source is also required to meet the record keeping requirements in accordance with Regulation 7.59, section 6.

### 2) Opacity/PM

Monitoring of PM emissions is not required as combined potential, uncontrolled emissions from U1 and U2 are 0.08 pounds per hour, which is below the allowable emission rate of District Regulation 7.08. Continued compliance will be tracked using annual emissions inventory reporting. Per Regulation 2.16, sections 4.1.9.1, visible emission surveys and filter checks must be performed to demonstrate compliance with Regulation 7.08.

#### 3) **HAP**

- (a) The source is required to comply with applicable monitoring and record keeping requirements of 40 CFR Part 63, Subpart MMMM.
- (b) 40 CFR Part 63, Subpart MMMM National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products establishes three options to demonstrate compliance with the organic HAP emission standards in accordance with 63.3891: Compliant Material Option, Emission Rate Without Add-on Controls Option, and Emission Rate With Add-on Controls Option. Since the paint systems are not equipped with any add-on controls for HAPs, the compliant material option or the emission rate without add-on controls option shall be used to demonstrate compliance.
- (c) Per 40 CFR 63.3891, all coatings (as defined in 40 CFR 63.3981), thinners and/or other additives, and cleaning materials used in the affected source must be included when determining whether the organic HAP emission rate is equal to or less than 2.6 lb organic HAP per gallon of coating solids used during each 12-month compliance period.

#### 4) **TAC**

Regulation 2.16, sections 4.1.9.1 and 4.1.9.2 require sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit.

#### iv. Reporting

#### 1) **VOC**

Regulation 7.59 does not establish any reporting requirements. Regulation 2.16, section 4.1.9.3 establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit. The source is required to report any permit deviations or exceedances of the VOC standard in their semi-annual compliance reports.

### 2) Opacity/PM

Regulation 7.08 does not require any specific reporting requirements for opacity or PM, however, Regulation 2.16, section 4.1.9.3 requires reporting to assure compliance with the terms and conditions of the permit. The source is required to report their visible emissions survey results and any missed filter inspections in their semi-annual compliance reports.

#### 3) **HAP**

- (a) The source is required to comply with applicable reporting requirements of 40 CFR Part 63, Subpart MMMM.
- (b) In accordance with 40 CFR Part 63, Subpart MMMM, section 63.3920(a)(1) and 63.3920(a)(1)(iv), Conco may submit their Subpart MMMM semi-annual compliance reports on the same schedule as the Title V operating permit reporting requirements.

#### 4) **TAC**

Regulation 2.16, section 4.1.9.3 establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

#### c. Emission Unit U3 - Two (2) Parts Washers

## i. **Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E26: Cold solvent parts cleaner with secondary reservoir	10 gallon	2004	5.00, 5.01, 5.21, 5.23,	Regulation 5.00, 5.01, 5.21, and 5.23 (STAR Program) establishes the requirements for Environmental Acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.
E27: Cold solvent parts cleaner with secondary reservoir	30 gallon	2004	and 6.18	Regulation 6.18 applies to each cold cleaner that use VOCs to remove soluble impurities from metal surfaces.

## ii. Standards/Operating Limits

### 1) **VOC**

Regulation 6.18, section 4 establishes the requirements to install, maintain, and operate the parts washers.

#### 2) **TAC**

The current cleaning solvent used at Conco contains up to 5% of Category 2 TAC 1,2,4-Trimethylbenzene (CAS No. 95-63-6). Potential emissions are below the de minimis level of 11 lb/hr and 9,636 lb/yr as described in Regulation 5.21, section 2.4.

#### iii. Monitoring and Record Keeping

#### 1) **VOC**

The source is required to monitor and maintain records in accordance with Regulation 6.18, section 4.4.

#### 2) **TAC**

Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2 require sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit.

Permit No: 88-97-TV (R1) Plant ID: 0047

#### iv. **Reporting**

### 1) **VOC**

Regulation 6.18 does not establish any reporting requirements.

#### 2) **TAC**

Regulation 2.16, section 4.1.9.3 establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

## **III.** Other Requirements

- **1. Temporary Sources:** The source did not request to operate any temporary facilities.
- **2. Short Term Activities:** The source did not report any short term activities.
- 3. Emissions Trading: N/A
- **4. Alternative Operating Scenarios**: The source did not request any alternative operating scenarios

## 5. Compliance History:

Incident Date	Regulation Violated	Result
05/21/1999	7.59 (Exceeded allowable VOC content)	Settled (08/26/1999)
03/08/2000	2.16 (Failed to perform the required visual emission surveys as required in the permit)	Settled (06/19/2001)
03/01/2001	2.16 (Failed to submit semi-annual report)	Settled (06/19/2001)
01/29/2007	2.16 (Exceeded allowable VOC content)	Settled (09/17/2009)

- **6.** Calculation Methodology or Other Approved Method: There are no other methodologies for this source.
- 7. Insignificant Activities

Equipment	Quantity	Basis for Exemption
Internal combustion engines—forklifts <sup>1</sup>	9	Regulation 2.02, sec. 2.2
Robotic welder controlled with baghouse	1	Regulation 2.02, sec. 2.3.4
Brazing, soldering, or welding equipment	46	Regulation 2.02, sec. 2.3.4
Dust or particulate collectors that are located in-doors, vent directly indoors into the work space, collect no more than one ton of material per year and do not collect materials listed in Regulation 5.11, 5.12, or 5.14. This is the baghouse controlling the robotic welding station.	1	Regulation 2.02, sec. 2.3.21
Pyrolysis oven (aka hook strip oven). Used for cleaning paint hooks that carry products through the painting process.  (Manufacturer: Armature Coil Equipment, Inc. Model: 260-RKG, Max Capacity: 60 lb/hr, Installation Date: 1989)	1	Regulation 2.16, sec. 1.23.1
Gas-fired heaters (Manufacturer: Dayton Infra-red, Input rating: 90,000 Btu/hr) <sup>2</sup>	14	Regulation 2.02, sec 2.1 and Regulation 7.06, sec. 2.1

## Notes:

1.

Manufacturer	Model
Hyster	S40C
Toyota	7FGCU25
Yale	GLCO40ADNUAE077
Yale	GLCO40AFNUAE082
Yale	GLCO40AFNUAE082
Yale	GLCO40AFNUAE082
Yale	GLCO40ADJUAE077
Yale	GC050RDN4AE083
Yale	GLC040ABJUAF083
Yale	GLCO40AENUAE083
Yale	GLC040ABJUAE083
Yale	GLC040ABJUAE083
Yale	GLC040ABJUAE083

- 2. This unit is not a boiler or process heater as defined in DDDDD.
- 1) Insignificant activities identified in District Regulation 2.02 Section 2, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
- 2) Insignificant activities identified in District Regulation 2.02 Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
- 3) The District has determined pursuant to Regulation 2.16 section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed.
- 4) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 5) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
- 6) The owner or operator elected to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions to be reported on the annual emission inventory.